

Date: Mon, 18 Apr 94 04:30:13 PDT  
From: Ham-Equip Mailing List and Newsgroup <ham-equip@ucsd.edu>  
Errors-To: Ham-Equip-Errors@UCSD.Edu  
Reply-To: Ham-Equip@UCSD.Edu  
Precedence: Bulk  
Subject: Ham-Equip Digest V94 #113  
To: Ham-Equip

Ham-Equip Digest                      Mon, 18 Apr 94                      Volume 94 : Issue 113

## Today's Topics:

Amps (plans)  
Dual band mobile recommendation?  
HT with extended RX (and the winner is . . . (2 msg)  
Info on Ham for an interested could-be HAM (2 msg)  
KENWOOD 850SAT - Experiences (2 msg)  
MFJ-9040  
Need Linear Amplifier info..  
Radio Shack problems!!  
Screen voltage for pr. 4cx250B's on 2M?  
Wanted: info on Cheap O-Scope  
WANTED: Sony or Grundig radios

Send Replies or notes for publication to: <Ham-Equip@UCSD.Edu>  
Send subscription requests to: <Ham-Equip-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Equip Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-equip".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

Date: 17 Apr 1994 19:29:01 -0400  
From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!news.ans.net!  
hp81.prod.aol.net!search01.news.aol.com!not-for-mail@network.ucsd.edu  
Subject: Amps (plans)  
To: ham-equip@ucsd.edu

Does anyone have a plans (or a source) for an inexpensive home-brew 2 meter and/or 440 amp? I'd like to have one for volunteer events, ARES and SKYWARN work, and the like. However, these \$200 & up units are budget busters. A no-frills model would be fine.

If anyone can help me, I'd really appreciate it.

73 de KB5ZBR

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Date: 17 Apr 1994 19:24:59 -0500  
From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!not-for-mail@network.ucsd.edu  
Subject: Dual band mobile recommendation?  
To: ham-equip@ucsd.edu

I am interested in comments from users of the Kenwood TM-732 about the performance of the 2-meter receiver, intermod susceptibility, etc. I am considering that rig as well as possibly the Standard dual band, and would like to know if these radios really get crunched in high signal areas. Do any of the dual band radios perform as well as the Yaesu 2400 RX?

73

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David C. Gingrich, K9DC		Lockman Mills & Associates
Fishers Town Council		Telecommunications Consultants
11550 Crestview Drive		7007 Graham Road, Suite 201
Fishers, Indiana 46038		Indianapolis, Indiana 46220
(317) 849-1353		gingrich@indy.net   (317) 845-0204

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Date: Sun, 17 Apr 1994 17:16:54 GMT  
From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!news.umbc.edu!eff!news.kei.com!world!gdallal@network.ucsd.edu  
Subject: HT with extended RX (and the winner is . . .  
To: ham-equip@ucsd.edu

And the winner is . . . the Standard C558A, even though it lacks the Yaesu FT-530's lighted keyboard and dual in-band receive and cost \$120 more.

I was \*all set\* for the Yaesu. It had many attractive features missing from the Standard, and while some intermod problems had been reported, I decided they weren't critical because, while I work in Boston, I live outside the city. Other hams have Yaesu's and argue that where intermod is most severe (the towers on Route 128) there's no HT that doesn't suffer some intermod. People who wrote to me about Yaesu's were \*truly\* enthusiastic about their units. The people at HRO were enthusiastic about Yaesu's; even the salesman who admitted he thought the Standard was a better unit had a Yaesu

on his belt (he bought it before the 558A was available). The unit clearly had a nice set of features, the best bang for the buck, and was manufactured to high production standards.

The choice was clear. Get the Yaesu. The lighted keypad was a big plus. The dual in-band receive had important consequences for scanning as well as for hamming. If intermod turned out to be a problem, I could move up to the rumored Standard when it came out and would probably take a smaller financial loss selling the Yaesu than the Standard (if, in the meantime, one of my sons didn't get licensed and get the unit as a hand-me-down). My credit card was in my hand.

But there was one \*little detail\*. As I reported publicly and mentioned privately, I was going to compare the HT's against my PRO-43 to see how they functioned as makeshift scanners. As luck would have it, HRO had a used FT-530 for sale, and \*it had been modified for extended receive\*.

It is illegal to listen in on cellular frequencies, but, I believe (and others more knowledgeable should comment) one exception to the rule is for the purpose of antenna testing. So, we set the volume and squelch on the Yaesu and the 43 and got ready to see just how many transmissions each would lock on as we went up the band.

No company publishes specs for out-of-band behavior. Even though the Yaesu has steps of 5, 10, 12.5, 15, 20, 25, and 50 kHz in band, in this particular range it would allow steps of 12.5 kHz only.

This is a political issue for me. It is illegal to listen to cellular, so I do not listen to cellular. However, I, along with many others, believe that this law is foolish and inappropriate because if signals pass through our bodies, we should be free to listen to them as we please. (Some would say we should be free to do \*whatever we want\* with them.) I also think there is a good chance that as soon as this law is tested in federal court it will be found unconstitutional. For this reason, I do not wish to own any equipment that has been permanently crippled like the FT-530, if an alternative is available.

As far as I can tell, the Standard is not crippled this way. Its steps (the same as the FT-530's) appear to be available for out of band RX. And so I purchased a 558A.

If I acted too hastily, it's only that I probably should

have given the IC-W21AT some further consideration. Having decided earlier that the FT-530 overshadowed the W21-AT, I neglected to move it back to the list of possibilities when the FT-530 was eliminated. The W21AT, too, has lighted keyboard and dual in-band receive. I didn't check out-of-band step sizes, though.

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Date: 17 Apr 1994 14:48:41 -0500  
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!news.ans.net!  
mailhost.interaccess.com!interaccess.com!adoane@network.ucsd.edu  
Subject: HT with extended RX (and the winner is . . .  
To: ham-equip@ucsd.edu

gdallal@world.std.com (Jerry Dallal) writes:

... Misc text deleted.

> Other hams have Yaesu's and argue that where intermod is most  
> severe (the towers on Route 128) there's no HT that doesn't  
  ^^^^^^

> suffer some intermod. People who wrote to me about Yaesu's  
> were \*truly\* enthusiastic about their units. The people at  
> HRO were enthusiastic about Yaesu's; even the salesman who

... More deleted.

I use a Motorola System Saber, and I never get any intermod. In fact, I've been on a 50+ story building that had radio/commerical/paging transmitters on it and was able to talk to someone simplex without an antenna. If you want quality, don't buy Amateur Radio Japanese crap.

Ken-wood, would you?  
Standard, NOT.  
Ick-com.  
Ick-zoo.

(Go ahead, flame me.)

73, de N9KET  
Andrew

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Andrew J. Doane                      Nuclear Greenhouse BBS    adoane@shell.portal.com  
1010 W. Springfield Ave              (708) 998-0008            Amateur Radio N9KET  
Apt #303                      Running GTalk/GTnet            (800) 302-0896 Pager

Urbana, IL 61801

Agent\_X (Sysop)

andyd@IRC (IRC Op)

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Date: Sun, 17 Apr 1994 16:13:26 GMT

From: ihnp4.ucsd.edu!swrinde!gatech!news.ans.net!malgudi.oar.net!witch!oldhagbug!  
jdick@network.ucsd.edu

Subject: Info on Ham for an interested could-be HAM

To: ham-equip@ucsd.edu

First off let me say I am currently a Cber and I enjoy it. I hope that doesn't influence any of you hams in the wrong way as I understand there is some adversity between illegal CBers and ham operators. Nuff said bout that lets get down to picking your ham brains for info!

I have heard much about ham operation that interests me. I don't know if all of what I will type is true or not, but that's what I'm here for.

I have heard that on ?2 meters? and a "dial-pad" you can connect up to a ?repeater? and make local phone calls? Do you need to belong to any club to use someone elses repeater? Can anyone copy your "phone" conversation? Is this an alternative to Cellular? Does the new no-code (I don't know morse, but I could learn if I had to) allow this band and.or this type of communicating?

Here is one that should stir many opinions. On 27Mhz we get alot of skip and it destroys local communications. Although it is illegal to talk skip (I have read) sometimes it is fun and sometimes it is aggreivating. So, what is the best ham band to use to avoid skip? What is the best ham band to talk skip? I hear skip on ham is legal. Is it? I would assume 10-meters would be a good skip area because of it closeness to CB freqs. Again am I able to use these bands with the no-code?

Do ham radios usually cover many ham bands? Will one antenna cover many ham bands? What is a good starter radio? What would you expect me to pay to enter the ham arena? Bargain shopping and all. I need radio and antenna, unless I can use my existing CB antenna, wishful thinking on my part probably.

Obviously I have a computer and I have heard about ?packet? radio. What is this? What band is this done on?

I think that covers all that I can think of now. If you have anything to add please feel free to put it in words and type your fingers to the bone. Looking forward to your responses!

I think messages should be posted and not e-mailed in case and other interested passerbys happen to want the same information.

Thanks in advance for your help.

John  
Magician

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Date: 17 Apr 1994 19:27:09 GMT  
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!usenet.ins.cwru.edu!odin!trier@network.ucsd.edu  
Subject: Info on Ham for an interested could-be HAM  
To: ham-equip@ucsd.edu

In article <48@oldhagbug.win.net>, John Dick <jdick@oldhagbug.win.net> wrote:  
>I have heard that on ?2 meters? and a "dial-pad" you can connect up  
>to a ?repeater? and make local phone calls?

On the 2 meter band, repeaters are quite popular. These are special-purpose radios, mounted in advantageous locations with good antennas, that receive and retransmit weak signals. Mobile and portable 2m ham rigs talking to each other ("simplex") have a typical range of maybe 0.5 to 10 miles, depending on the antennas available. Going through a repeater can increase that range to 30 or 40 miles or more. Linked repeaters can give hundreds of miles of coverage.

Many, but not all, repeaters have "autopatches" which can make phone calls.

>Do you need to belong to any club to use someone elses repeater?

Sometimes. Many repeaters are "open", meaning anyone can use them. It's considered proper to join the club supporting a repeater if you use it often. Repeaters are expensive and hard work to operate.

Autopatches are less often open. (A repeater can be open but have a closed autopatch.) For autopatch access, it's usually necessary to join the club that operates that repeater.

>Can anyone copy your "phone" conversation?

Yes. A popular repeater probably has a couple dozen hams and maybe another couple dozen scanner owners listening to every conversation.

Ham radio rules are set up so that anyone can copy any conversation. Secrets are forbidden.

>Is this an alternative to Cellular?

Maybe. Autopatch phone calls have to be kept short, whereas cellular calls can be as long as you want. Autopatches are less private than cellular. You have to be in range of a repeater on which you have autopatch access. No business use is permitted, period.

Cellular is plug-and-play; autopatches aren't.

>Does the new no-code (I don't know morse, but I could learn if I had to) allow this band and/or this type of communicating?

Yes.

>So, what is the best ham band to use to avoid skip? What is the best ham band to talk skip?

Hams have many bands available. There are also many different ways to "skip" from one place to another, and each band has its own characteristics for long-distance propagation.

In general, the higher-frequency the band, the less often you will see long-distance communications happen by accident. 2 meters, 1.25 meters, and 70 centimeters are popular bands for local communications.

For ionospheric reflection, which is probably what you are seeing on 11m, the choice of the best band changes with the sunspot cycle, the time of day, and conditions of the sun's surface and earth's upper atmosphere.

>I hear skip on ham is legal. Is it?

Yes, quite legal, as long as the ham is operating within the frequencies allowed for his/her license. Some hams really get into long-distance communications, called "DX". There are even awards for making lots of DX contacts.

>I would assume 10-meters would be a good skip area because of its closeness to CB freqs.

It is a good band for skip during the strong part of the 11-year sunspot cycle. We're on the declining edge of the cycle right now, so 10 meters is not going to be very good for DX for another 5 years or so. There are lots of other bands that can be used for DX, however, and there will always be freak occurrences that will open up 10 meters.

My first HF contact, a few weeks ago, was a conversation from Ohio to California on 10 meters. That is fairly respectable for a new ham using a "dead" band. :-)

(To give you an idea of what is possible, my second contact ("QS0") was with a ham in Spain on 20m morse code.)

>Again am I able to use these bands with the no-code?

No. The no-code Technician license can use 6 meters, which has a wide variety of unpredictable propagation modes, but you need morse code in order to get onto 10m and below, where world-wide communications is common and somewhat reliable.

If you spend a couple of weeks with code tapes and learn 5 WPM morse code, you can get onto 10 meters voice and 80, 40, 15, and 10 meter morse code. You can do worldwide communications with these bands.

>Do ham radios usually cover many ham bands?

It depends. Commercial rigs for HF (the bands that get ionospheric skip) tend to cover all HF bands. Rigs for VHF and up often handle only one band, or sometimes two. It's also possible to buy a rig for one band and hook up a converter to use it on other bands; hams who are into VHF, UHF, and microwave do that a lot.

>Will one antenna cover many ham bands?

It depends on the antenna and the bands in question. The answer to this question is "maybe", and that's final. ;-)

You may be able to use your CB antenna for 10 meters, but if you're going for no-code, that won't be very useful.

Hams often build antennas. It's not too hard to put up a good antenna for \$10 to \$30.

>What is a good starter radio? What would you expect me to pay to enter  
>the ham arena?

Your choice of start radio depends on which bands you plan to work.

>Obviously I have a computer and I have heard about ?packet? radio.  
>What is this? What band is this done on?

Packet radio is, in essence, building a network using radio links. There is a lot of room for experimentation here! Packet activity occurs on all bands, but most of it is on 2 meters.



There are some good books about ham radio out there. They answer all of these questions and more. Look for them in your local library, bookstores, ham radio stores (most are pretty friendly), or Radio Shack. Watch out for older books in the library. While they get the idea of ham radio across, the license requirements, procedures, and privileges have changed a lot in recent years.

Another good way to get information is to find some area hams. Ask around and some may surface, or just show up at a meeting of a ham radio club! You'll probably find someone friendly who can help you get into ham radio.

Stephen KB8PWA/AA

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Stephen Trier KB8PWA "It don't mean a thing if it ain't got that  
Other: trier@ins.cwru.edu certain je ne sais quoi."  
Home: sct@po.cwru.edu - Peter Schickele

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Date: Mon, 18 Apr 1994 00:04:22 GMT  
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!torn!nott!cunews!  
freenet.carleton.ca!FreeNet.Carleton.CA!as459@network.ucsd.edu  
Subject: KENWOOD 850SAT - Experiences  
To: ham-equip@ucsd.edu

I AM IN THE MARKET FOR A KENWOOD 850SAT RADIO AND HOPE TO BUY ONE SHORTLY. I HAVE RECEIVED EXCELLENT ADVICE FROM OTHER AMATEURS THE PROS/CONS OF SUCH AN ACQUISITION. HAS ANYONE ANY PERSONAL OBSERVATIONS THAT THEY MIGHT BE ABLE TO MAKE ON SUCH A UNIT ?

MANY THANKS FOR ANY INFORMATION THAT YOU MAY HAVE.

JOEL LEVIS  
VE3CJJ

AS459 OR JOEL.LEVIS@CAN.REM.COM

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Date: 18 Apr 1994 02:24:03 -0400  
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!news.ans.net!hp81.prod.aol.net!  
search01.news.aol.com!not-for-mail@network.ucsd.edu  
Subject: KENWOOD 850SAT - Experiences  
To: ham-equip@ucsd.edu

I've had one for over a year. It has proven to be an outstanding rig at this QTH for both SSB and CW operation. Antenna tuner is very fast, and band memories are very helpful.

Danny Goodman AE9F/6

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Date: 17 Apr 1994 11:40:09 GMT  
From: ihnp4.ucsd.edu!usc!sol.ctr.columbia.edu!newsxfer.itd.umich.edu!  
news1.oakland.edu!vela.acs.oakland.edu!prvalko@network.ucsd.edu  
Subject: MFJ-9040  
To: ham-equip@ucsd.edu

Keith M. Hamilton (ak238@yfn.ysu.edu) wrote:

: I am considering the purchase of the MFJ-9040 at Dayton. I would  
: appreciate your comments pro and con about the rig. Seems like  
: the very best radio for the money as far as I've seen.  
: Agree?

Nope. The very best radio for @\$160 (being reasonable here) would be a used TenTec Century 21.

Now if you are talking brand-new-in-the box, I personally can't think of any other HF transceivers available for that price. I have a 9040 and it is VERY nice. Works GREAT with the new Radio Shack DSP unit too.

73 paul wb8zjl

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Date: 17 Apr 1994 14:38:12 GMT  
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!pipex!sunic!trane.uninett.no!  
nac.no!nntp-oslo.uninett.no!mac\_inge!tomrune@network.ucsd.edu  
Subject: Need Linear Amplifier info..  
To: ham-equip@ucsd.edu

Hi!

I am thinking of buying a Linear Amplifier for my HF rig (FT757GX2).

I can buy the DRAKE L4D, the YAESU FL-7000, or the KENWOOD TL922.

I wonder if somebody can tell me something about any of these Amplifiers because I have no information

about them.

I would like to know about output power, which tubes  
etc.

vy 73s de Tom

LA1BJA

e-mail: tomrune@mac\_inge.itek.norut.no

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Date: 15 Apr 94 03:01:49 GMT

From: agate!howland.reston.ans.net!europa.eng.gtefsd.com!uhog.mit.edu!

xn.ll.mit.edu!noc.near.net!news.delphi.com!usenet@ucbvax.berkeley.edu

Subject: Radio Shack problems!!

To: ham-equip@ucsd.edu

I knew someone that also had problems with a Radio Shack HT, I'm not sure what kind it was. I know myself from experience, I had a tandy computer, and it was pure garbage. I'm glad I finally invested in an IBM. I think radio wise, you are better getting

a Yasue or Kenwood. I know this friend had his HT in the shop more than he used the thing. I hope this helped a little.

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Date: Sun, 17 Apr 1994 15:53:11 GMT

From: ihnp4.ucsd.edu!library.ucla.edu!csulb.edu!csus.edu!netcom.com!

dgf@network.ucsd.edu

Subject: Screen voltage for pr. 4cx250B's on 2M?

To: ham-equip@ucsd.edu

I was fortunate (!) to acquire the RF deck from a push-pull pair of 4CX250Bs on 2M, built verbatim from an article in Feb. 1964 QST. The P/S was in pieces and I decided to build a new one. Most screen supply design's I've seen are regulated (the unit here had VR \*tubes\*). I can VR with tubes, string of zener diodes, (presumably) a pass transistor linear regulator, or just build an unregulated supply with excess bleeder resistor dissipation. How important is regulation on the screen supply? I've seen screen voltages for this kind of tube from 200V to 350V --- how do I pick the best value? Plate voltage will be ~2200V under load. Advice & comments appreciated! 73 Dave WB0GAZ dgf@netcom.com

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Date: 18 Apr 1994 06:39:50 GMT

From: mozz.unh.edu!christa.unh.edu!rdm@uunet.uu.net

Subject: Wanted: info on Cheap O-Scope

To: ham-equip@ucsd.edu

I would like to purchase an O-scope for general use. I would prefer a 40 to 50 MHz dual trace scope. However, I don't want to spend a small fortune, nor do I want to get stuck with a boat anchor. (I already have plenty of those in storage :) I've been looking through surplus catalogs as well as \_Popular Electronics\_. Everything listed in the surplus places seems like overpriced antiques.

In the May issue of \_Popular Electronics\_ there are several brand names listed that I havent heard of, but would fall into my price range.

(all of these are Dual Trace)

Alplab has a 25 MHz D.T. scope for \$315.

Kelvin lists a 20 MHz for \$385, and a 40 MHz at \$655. the latter is said to have delayed sweep, is this a useful feature?

Elenco has a 25MHz for 349, and \$100 more gets you delayed sweep.

Finally, Elenco also offers a Digital storage scope good to 20MHz, switch-able between Digital and Analog. This goes for \$730.

I've had some experience with digital scopes in the past, and like the ability to capture a waveform.

Given these choices, (or feel free to provide alternative suggestions) which is the best scope for the money. And, should I stay away from a particular brand?

Thanks for you feedback.

73's DE Rick

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=====
+ Rick Miller      | KA3BZX | (603) 862-4315 {W} +
+ Rm 323 Morse Hall | rdm@christa.unh.edu | (603) 742-8958 {H} +
+ University of New Hampshire | R_MILLER@unhh.unh.edu|-----+
+ Space Science Center | Mechanical Engineering| Lookin' for work in +
+ Durham, NH 03824 | Department | May '94
+
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Date: 17 Apr 1994 11:45:08 -0400  
From: ihnp4.ucsd.edu!swrinda!gatech!news.ans.net!hp81.prod.aol.net!  
search01.news.aol.com!not-for-mail@network.ucsd.edu  
Subject: WANTED: Sony or Grunding radios

To: ham-equip@ucsd.edu

WANTED

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SONY ICF-2010 or SONY ICF-SW77 or GRUNDING SATELLITE 700 or  
GRUNDING YACHT BOY 400 short wave radio

Please state condition & asking price.

Contact Joe at:

Voice (818) 366-9787

Fax (818) 366-0779

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End of Ham-Equip Digest V94 #113

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